

High Bandwidth Large Stroke Spin-stand
for Data Storage Component Testing

Abstract of the Disclosure

10 A high bandwidth, large stroke spin-stand for testing components of a disc drive includes
a coarse positioning stage and a rotary micropositioning stage. The spin-stand is capable of
positioning a transducer head relative to the data storage disc based on one or both of: (1) an
angular position of a rotary actuator arm in the rotary micropositioning stage; and (2) servo data
read from the data storage disc. The angular position of the rotary actuator arm is detected by an
encoder. In one embodiment, position adjustments are based on the detected angular position. In
5 another embodiment, position adjustments are based on servo data read from the data storage
disc, but are also conditional on angular position being consistent with the servo data. In yet
another embodiment, both angular position and servo data from a track are linearized to generate
PES adjustment parameters that are recorded on the data storage disc to redefine the track as
10 more circular or to linearize the PES.